Other Stressors Working Group:

Other Stressors Conservation Measures

Presentation to
BDCP Steering Committee
September 5, 2008

Purpose and Process Other Stressors Working Group

- Address stressors other than flow/ operational related stressors and physical habitat related stressors
- 16 meetings between March 25 and August 26, 2008
- 18 specific technical presentations given

List of OSWG Members and Regular Participants

John McCamman, co-chair, DFG

Brent Walthall, co-chair, Kern Co Water Agency Laura King Moon, Management Team Ara Azhderian, SLDMWA Jerry Bruns, CVRWQCB Laura Simonek, Met.

Russ Strach, NMFS

Ted Meyers, NMFS

Frances Brewster, SCVWD Dan Welsh, FWS Lori Clamurro, DFG Kari Fisher, CFBF Jim Haas, FWS Dave Harlow, SWC Stephanie Spaar, DWR Mark Gowdy, SWRCB Chris Carr, SWRCB Scott Cantrell, DFG

Presentations to the OSWG

Presentation Topics	Presenters
Non-Native Invasive Species	Rick Wilder
Temperature	Dave Fullerton
Water Quality Monitoring	Bill Bennett
Toxics	Mike Aceituno
Disease and Parasites	Rick Wilder
Non-project Diversions	Rick Wilder
Hatcheries	Larry Wise
Mark-Select Efforts for Hatcheries	Rick Sitts & Dave Fullerton
Delta Smelt Refuge Facility	Brad Baskerville & Joan Lindberg
Toxics and Disease Monitoring	Swee Teh
Toxics Monitoring	BJ Miller
State Water Board Toxics Efforts	Karen Larsen
Water Quality	Larry Wise
Other Recreational/Commercial Activities	Rick Wilder
Harvest	Rick Wilder
Non-project Diversions Research	Chuck Armor
DFG other stressors matrix	Perry Herrgesell
Delta Bay Enhanced Enforcement Program	Lt. Nancy Foley

Handouts Today

- HO#1 Summary Table of Other Stressor Conservation Measures
- HO#2 Detailed Descriptions of Other Stressor Conservation Measures
- HO#3 Summary Table of Other Stressor
 Objectives

Status of Materials Provided

- Work in progress
- Initial preliminary drafts of conservation measures
- A "laundry list" of measures of various type, purpose, and effect
- Details not developed until SC direction provided
- Will be refined over coming months with each iteration

Other Stressors Conservation Measures Categories

- Non-native invasive species
- Toxics contaminants
- Other water quality issues
- Hatcheries

- Harvest
- Non-project diversions
- Commercial/ recreational activities

Types of Conservation Measures

- Programs developed and implemented by BDCP
- Existing programs augmented by BDCP funding
- Collaboration with other existing programs
- Comment on other agency actions
- Recommend changes to regulations

Actions by Steering Committee

- Provide input as to measures to keep, discard, revise
- Provide guidance as to additional details and evaluations needed to make decisions regarding specific measures
- Written comments to SAIC by Sept 19
- Additional discussion at Sept 19 and Oct 3
 SC meetings

Non-Native Invasive Species: Objectives & Measures

- 1. Create formal coordinating framework for addressing non-native species in California
 - 1. Fund interagency invasive species coordination plan (DFG)
- 2. Reduce vectors of non-native invasive species
 - 2. Fund Commercial Vessel Fouling Program (State Lands)
 - 3. Fund Watercraft Inspection Program (DFG)
 - 4. Recommend hazard control plan preparation (lead agencies)
 - 5. Fund public outreach position (DFG)

Non-Native Invasive Species: Objectives & Measures (cont)

- 3. Support early detection and rapid response programs to reduce invasions
 - 6. Fund early invasive detection programs (DFG)
 - 7. Fund Delta invasive rapid response team (DFG)
 - 8. Fund zebra/quagga mussel response plan (DFG)
- 4. Reduce established non-native invasive species
 - 9. Fund removal of submerged aquatic vegetation (Boating & Waterways)

Non-Native Invasive Species: Objectives & Measures (cont)

- Increase the legal harvest of non-native predators
 - 10. Recommend relaxed fishing limits (F&G Comm)
- 6. Reduce predation on covered fish species at release sites of salvaged fish
 - 11. Reduce predation mortality of salvaged fish (DWR)

Toxic Contaminants: Objectives & Measures

- 1. Reduce the load of toxic contaminants from wastewater treatment plant discharges
 - Coordinate w/wastewater district to address ammonia (Sac Regional Dist)
 - Coordinate w/wastewater districts to address endocrine disruptors (Wastewater Districts)
- 2. Reduce the load of methylmercury entering the Delta and in-Delta sources
 - 3. Fund programs to reduce methylmercury (RWQCB)

Toxic Contaminants: Objectives & Measures (cont)

- 3. Reduce the load of toxics entering the Delta and in-Delta sources from agricultural practice
 - 4. Cooperatively develop agricultural chemical management plans (BDCP)
 - 5. Fund agricultural return flow program (RWQCB)
 - 6. Support reassessment of pesticide labels (CDPR; EPA)
- 4. Reduce the inputs of toxics into the Delta by commercial activities.
 - 7. Coordinate with agencies regulating urban runoff (lead agencies)
 - 8. Coordinate with agencies regulating dredging (lead agencies)

Toxic Contaminants: Objectives & Measures (cont)

- Improve the knowledge base of Delta users on toxics
 - 9. Fund pollution prevention programs (Contra Costa Co; Boating & Waterways)
 - 10. Fund pharmaceutical disposal education program (USFWS)
 - 11. Fund educational outreach for urban runoff programs (cities & counties)
- 6. Coordinate efforts to detect and respond to toxic events
 - 12. Implement contaminant monitoring and response program (BDCP)

Other Water Quality Issues: Objective & Measures

- 1. Maintain dissolved oxygen levels in waterways to levels above critical thresholds of covered fish species.
 - 1. Coordinate to address low oxygen in Stockton Deep Water Ship Channel (USACE; Port Stockton)
 - 2. Coordinate with landowners to reduce managed seasonal wetlands effluent (BDCP)

Hatcheries: Objectives & Measures

- 1. Improve hatchery practices to minimize their effects on wild populations of salmonids.
 - 1. Fund Hatchery and Genetic Management Plans for Central Valley salmonid hatcheries (hatcheries)
 - 2. Fund Total Marking of Hatchery fall-run Chinook salmon for a Mark-Select Fishery (hatcheries)
 - 3. Fund Total Tagging of all hatchery-produced salmonids (hatcheries)
- 2. Create programs for preserving populations and genetic diversity of delta and longfin smelt.
 - 4. Fund Artificial Propagation Programs for Delta and Longfin Smelt (USFWS; UC Davis)

Harvest: Objectives & Measures

- 1. Minimize the adverse effects of illegal harvest on Chinook salmon, steelhead, and sturgeon
 - 1. Fund Increased Staffing Delta-Bay Enhanced Enforcement Program (DFG)
 - 2. Fund Education and Outreach to Prevent Illegal Harvest (DFG)
- 2. Regulate the legal harvest of Sacramento splittail to maintain or increase the abundance of splittail.
 - 3. Support the Establishment of Regulations on Sacramento Splittail Harvest (F&G Comm.)

Non-Project Diversions: Objectives & Measures

- 1. Screen non-project diversions to reduce the risk of entrainment of covered species
 - 1. Fund Installation of Fish Screens at Non-Project Diversions (USBR; DFG)
- 2. Modify existing non-project diversion locations and/or operations
 - 2. Fund Cost-Sharing to Remove, Relocate, Consolidate, Modify and Alter Timing of Non-Project Diversions (BDCP)



- 1. Reduce the physical effects of recreational boating on covered fish species.
 - 1. Set Low Boating Speeds at Sensitive Habitat Sites (Boating & Waterways; local governments)

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